

Patent claims

1. Phase shifting wavefront superimposition method,
5 in particular a phase shifting interferometry method, for wavefront measurement of optical imaging systems, wherein
 - the intensities (I_n) of superimposition patterns
10 of object wavefronts and reference wavefronts produced successively in time with respective phase shifting by predefinable phase steps (φ_n) are registered for a respectively predefinable location and, from the registered intensities, an object-induced phase difference (φ) between
15 object wavefront and reference wavefront is determined for the respective location,
 - phase shift errors ($\delta\varphi_n$) in the superimposition patterns produced successively being determined by means of a spatial superimposition pattern
20 evaluation and taken into account correctively in determining the object-induced phase difference (φ).
2. Phase shifting wavefront superimposition method
25 according to claim 1, further characterized in that predefined phase jumps in a one-dimensionally or multi-dimensionally periodic structure are used to provide the object wavefronts or reference wavefronts in the determination of the phase step
30 errors.
3. Phase shifting wavefront superimposition method
35 according to claim 1 or 2, further characterized in that, in order to take corrective account of the phase step errors in the determination of the object-induced phase difference, compensating correction contributions ($\delta\omega_n$) to apodisation weights (ω_n) are determined which are used in a relationship equation of the object-induced phase

difference as a function of the superimposition
pattern intensity.